

CLAIMS

1. A pseudo-3D total clothes coordination method comprising:
preparing a 2D standard avatar image, a standard 2D image and a
5 pseudo-3D image;
providing a user information;
generating a pseudo-3D user-adapted avatar image by correcting the 2D
standard avatar image automatically based on the user information; and
performing an automatic coordination corresponding to the user
10 information by converting the standard 2D image to a pseudo-3D coordination
image automatically in response to the corrected pseudo-3D user-adapted avatar
image.
2. The pseudo-3D total clothes coordination method of claim 1,
15 wherein generating the pseudo-3D image comprises:
preparing a red-green-blue(RGB)-format 2D image;
converting the RGB-format 2D image to a hue-saturation-intensity
(HSI)-format image;
obtaining a control point of a polynomial function according to an
20 brightness distribution chart of the HSI-format image;
creating a 3D curved surface by using a B-spline from the control point;
creating a virtual 2D development figure by applying a physical technique
to the 3D curved surface;
mapping pattern to the 3D curved surface by using the coordinate values
25 of the virtual 2D development figure; and
generating the pseudo-3D image by applying a shading function to the
pattern-mapped 3D curved surface.
3. The pseudo-3D total clothes coordination method of claim 2,

wherein the 3D curved surface is created by applying the B-spline function to the intensity value.

4. The pseudo-3D total clothes coordination method of claim 1,
5 wherein the user information comprises a primary size information, a personal information, a location information, a style information and other coordination-related information of a user or a combination thereof.

5. The pseudo-3D total clothes coordination method of claim 4,
10 wherein generating the pseudo-3D user-adapted avatar image comprises:

deriving a secondary size information automatically by using the primary size information and the personal information; and

correcting a size of the 2D standard avatar image automatically based on the primary size information, the secondary size information and the personal
15 information.

6. The pseudo-3D total clothes coordination method of claim 5,
wherein the user information further comprises a facial image information of the user and the facial image information is inserted into the generated avatar image.

7. The pseudo-3D total clothes coordination method of claim 5,
20 wherein the secondary size information is automatically derived by an artificial intelligence algorithm with reference to a statistical data of the coordination subject.

8. The pseudo-3D total clothes coordination method of claim 7,
25 wherein correcting the size of the 2D standard avatar image automatically comprises:

dividing the 2D standard avatar image into groups and setting control

points corresponding to the groups respectively;

linearly adjusting the size of the 2D standard avatar image according to a size change of each group; and

correcting a color value of each pixel according to the size adjustment.

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9. The pseudo-3D total clothes coordination method of claim 8, wherein the color value of each pixel is corrected according to a coordinate change of the pixel by a luminance value interpolation.

10 10. The pseudo-3D total clothes coordination method of claim 8, wherein generating the pseudo-3D user-adapted avatar image comprises:

setting a control point of the pseudo-3D image corresponding to a control point of the 2D standard avatar image;

15 linearly adjusting a size of the control point according to the size change of the 2D standard avatar image;

correcting the color value of each pixel according to the size change; and

merging the 3D user-adapted avatar image and the corrected pseudo-3D coordination image by setting a gap between the 3D user-adapted avatar image and the corrected pseudo-3D coordination image.

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11. The pseudo-3D total clothes coordination method of claim 4, wherein performing an automatic coordination comprises:

25 automatically generating the pseudo-3D coordination image most adaptive to the user by using the 2D image, a pattern, a color code, based on the personal information, the location information, the style information and other coordination-related information of the user or a combination thereof;

coordinating the pseudo-3D user-adapted avatar image by using the generated pseudo-3D coordination image;

acquiring a modified information by the artificial intelligence algorithm,

the modified information being provided by the user as a response to the coordinated pseudo-3D user-adapted avatar image; and

reflecting the acquired modified information to the style information.

5 12. A method of providing pseudo-3D user-adapted total clothes coordination using artificial intelligence, the method comprising:

providing a coordination-related information of a user including a primary body shape information, a personal information and a style information;

10 deriving a secondary body shape information through an artificial intelligence algorithm, based on the primary body shape information and the personal information;

15 generating a pseudo-3D user-adapted avatar image suitable to a user's body condition by using a 2D standard avatar image, based on the primary body shape information, the secondary body shape information and the personal information;

generating the pseudo-3D image automatically through the artificial intelligence algorithm, based on the user's coordination-related information; and

20 displaying the pseudo-3D user-adapted avatar image to which the generated pseudo-3D image is applied.

13. The method of claim 12, wherein the secondary body shape information most suitable to the user's body shape is derived through the artificial intelligence algorithm, based on statistical data of body shape.

25 14. The method of claim 13, wherein the primary body information and the personal information include sex, age, height, weight and bust girth.

15. The method of claim 14, wherein the secondary body shape information comprises a user's shoulder width, body width, bust width, bust

thickness, shoulder height and waist height.

16. The method of claim 12, further comprising:

entering modified coordination information of the user-adapted avatar
5 image;

acquiring of a user's style through the modified coordination information
by the artificial intelligence algorithm; and

reflecting the acquired user's modified style to the user's style
information.

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17. The method of claim 16, wherein generating the pseudo-3D
coordination image performs an automatic generation in response to a
coordination presentation according to a user's style, a user's location, weather, a
purpose and the like.

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18. An online service method of using a pseudo-3D total clothes
coordination comprising:

enrolling as a seller member on a service website;

registering a selling item;

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creating a standard 2D image of the registered item;

installing ActiveX by inserting an HTML code of the pseudo-3D
user-adapted coordination program using artificial intelligence on the service
website;

displaying a coordination of the selling item according to a coordination
25 request of a user on the coordination program;

processing a purchase request of the user for the displayed coordination
image; and

dividing profits from the item.

19. The online service method of claim 18, wherein creating the standard 2D image comprises:

drawing in an item such as a clothes having a specific style on a presented basic 2D coordination image;

5 assembling additional patterns by selecting prepared accessories such as a collar, a pocket, a button, a logo, a decoration and so on;

uploading a new additional pattern or an item pattern; and

adjusting sizes of the respective accessories when assembling additional patterns.

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20. The online service method of claim 18 further comprising:

requesting a custom-made order fitting to a user body shape information through the pseudo-3D user-adapted total clothes coordination method using artificial intelligence; and

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manufacturing and selling the custom-made clothes fitting to the user body shape information derived from the program in response to the custom-made order.

21. The online service method of claim 18 further comprising:

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evaluating the user body shape information and the user coordination style through the pseudo-3D user-adapted total clothes coordination method using artificial intelligence; and

recommending the user as a fashion model candidate when the user receives a grade over a specific level according to the evaluated result.

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22. The online service method of claim 19, further comprising:

creating a user-desired item by using the standard image assembling tool;

and

processing the order and delivering the created design through the

pseudo-3D user-adapted total clothes coordination program using artificial intelligence.

23. A method of generating a pseudo-3D avatar, the method
5 comprising:

preparing a 2D standard avatar image, a standard 2D image and a pseudo-3D image;

providing user information;

generating a pseudo-3D user-adapted avatar image by automatically
10 correcting the 2D standard avatar image based on the user information; and

coordinating the pseudo-3D avatar image automatically by automatically
converting the standard 2D image to the pseudo-3D coordination image in
response to the correction of the 3D user-adapted avatar image.

24. The method of claim 23, wherein the user information comprises a
15 user's facial image, and

the user's facial image is inserted into the generated avatar image.